

EBM Care, Inc.

Testimony before the Michigan Senate Appropriations Committee  
Wednesday, November 2, 2001

Good Afternoon. My name is Jack Fitzgibbons, and I am the President of EBM Care. I am here today with my colleague Robert Gebbie, one of EBM Care's founders and our Chief Technology Officer. Our Chief Medical Officer, Dr. Beverly Walters, who has met and presented her credentials to Chairman Kahn before, had hoped to be here today but could not make it in. As just a bit of background, Dr. Walters is a neurosurgeon and clinical epidemiologist with a career long interest in evidence-based medicine, the root of what we want to speak with the committee about today.

Until recently, Dr. Walters maintained her academic appointments as Clinical Professor of Neurological Surgery at New York University Medical School, Adjunct Professor of Neurosurgery at the Uniformed Services University of the Health Sciences in Bethesda, Maryland, and Director of Outcomes Research at Walter Reed Army Medical Center.

For many years, Dr. Walters was the chairperson of the Practice Guidelines Committee of the American Association of Neurological Surgeons, a member of the Outcomes Committee of the AANS/CNS, and a member of the Committee for the Assessment of Quality of the AANS/CNS. Her guidelines activities have included the development of the Guidelines for the Management of Severe Head Injury, the Guidelines for Prehospital Management of Traumatic Brain Injury, Guidelines for Penetrating Brain Injury, Spinal Cord Injury Guidelines, and the Guidelines for the Management of the Neurobehavioral Consequences of Traumatic Brain Injury. Her work on the Spinal Cord Injury Guidelines was recognized by Congress for its achievement.

Bob and I are here today on behalf of all of us at EBM Care to request continued support from the State of Michigan for a Traumatic Brain Injury treatment program that was successfully piloted in two Michigan Hospitals in 2009.

Traumatic brain injury is the leading cause of death and disability in the United States for those between 1 and 44 and most often strikes young males, in the prime of their lives. Suffering a Traumatic Brain Injury (TBI) is very serious and often changes not only the victim's life, but one's entire family. The incidence of TBI, according to the *Center for Disease Control*, is approximately 646 cases per one million of population, every year. As such, there are over 6,000 Michigan citizens who suffer a TBI each year.

Before I explain briefly the service and product that we offer, I would like to take just a minute to explain why the Legislature should care. The plain truth is that there are nearly 1000 cases of TBI each year in Michigan just from the Medicaid population alone. And, as TBI victims can remain alive in a coma, for a decade or more, there are hundreds more Michigan citizens who while they may not have been Medicaid eligible when they were injured, they become wards of the state, as their funding or insurance expires.

And Michigan's Medicaid budget, as the payer of last resort, is dramatically affected once family resources are exhausted. It is easy to see the magnitude of the burden this creates for your Medicaid program when the average cost of a year's care can exceed \$100,000 per individual. What we are presenting today is akin to enlightened health care reform, whereby health care change comes about not through higher taxes, or reduced benefits, or restricted enrollments, but through combining science and technology to help doctors deliver the very best care at the most critical times, leading to better outcomes. There can be no doubt that getting people better, faster, leads to lower cost of care.

There is ample evidence now in the medical research/literature demonstrating that the implementation of the approved adult head injury guidelines for the treatment of traumatic brain injury improves patient outcomes-reducing mortality by 50%, improving functional outcome by 50%, while reducing acute care costs by at least 20%. Most notably, improving functional outcome so dramatically would have a large impact on the need for long term care – the driver of so much of health care costs today, and applying evidence-based medicine can do this.

Evidence based medicine (EBM) is the practice of medicine guided by the strength of the best available research. It is a rigorous approach to evaluating the literature and developing practice recommendations substantiated and demonstrated to improve patient results. The adult head injury guidelines are written, published and approved for use by the *American Medical Association*, the *American Association of Neurological Surgeons*, the *Congress of Neurological Surgeons* and the *World Health Organization*. And even though these EBM guidelines are demonstrated to improve care, adherence has proven to be limited across the country.

EBM Care improves outcomes and reduces costs for acute injuries like TBI by delivering Evidence Based Medicine treatment guidelines in real time at the critical moment of care in trauma centers through our interactive, HIPPA compliant, software program. EBM Care is a quality assessment and quality assurance company. Our products bring evidence based guidelines to the finger tips of practitioners. In our TBI product series we initially assess the degree to which trauma centers are complying with the internationally accepted EBM guidelines and provide a real time, easy to use Internet-based tool, to assure that every patient gets the best care.

EBM Care builds on the success of its predecessor company (CarePath) with an updated and expanded product line. Both Dr. Walters and I led that organization and were involved briefly here in Michigan at St. Mary's and Borgess hospitals. Based on a cost savings study requested of us by New York State, conducted by independent actuarial firm, Watson Wyatt, now Towers Watson, New York's Medicaid program saved \$12 for every \$1 invested in this program in the 10 hospitals piloted there in 2009.

I am happy to report that unlike its forerunner organization EBM Care continues its focus to provide States with Medicaid cost saving solutions. We now offer not only our TBI – Adult Acute product, but we also have developed a TBI – Pediatric Acute product for victims under the age 18. This product is also based on internationally recognized and developed guidelines for this age group.

Lastly, in the course of our discussions over the past few months here, we have learned that Michigan receives approximately 40% of our wounded warriors who suffer head injuries. As a result and as part of our restart efforts, EBM Care will develop a third TBI product, based on internationally accepted guidelines, for the TBI – Rehabilitation phase of care for these victims. The traumatic brain injury rehabilitation guidelines are centered around vital cognitive deficits such as depression/anxiety, and aggressive behavior, all factors which can keep someone from returning to a normal and productive life.

So in summary, our request is straightforward. EBM Care charges \$100,000 a year, per hospital, for use of its products and services, which includes training all nursing and clinician staff, providing ongoing reporting, updating our software to reflect any changes in the guidelines and of course providing our feedback report for every eligible patient, for every shift, in the ICU in each participating hospital. For a \$200,000 appropriation EBM Care will:

1. Extend the previous pilots in St. Mary's and Borgess hospitals for all of 2012 free of charge to the State of Michigan.
2. Implement our new pediatric TBI product in a to be determined Pediatric Trauma Center free of charge to the State of Michigan.
3. Provide the pediatric TBI product to St. Mary's and Borgess, should they want it, free of charge to the State of Michigan.
4. Implement our adult TBI product in two additional Michigan level one trauma hospitals, selected by Michigan, through January 2013.
5. Develop and test a new TBI – rehabilitation product for eventual rollout across the state.
6. Provide reporting as soon as possible to this committee and the Department of Community Health on the base line level of compliance with best practice and improvement based on increase in compliance.
7. Commission an independent actuarial firm to provide a cost savings/ROI analysis to this committee and the State of Michigan on our work.

The ultimate objective is to have these products implemented across the entire state in the next fiscal year in all nine Level I Adult Trauma Centers and all three Level I Pediatric Trauma Centers. Once the TBI-Rehabilitation product is developed we are prepared to discuss implementation of this product across the State's entire Rehabilitation System.

Thank you for your time today and your continued support.

The Centers for Disease Control (CDC) estimates that Michigan has 6,000 cases of severe traumatic brain injury (TBI) each year ... 115 per week and 17 per day. Caring for Michigan traumatic brain injured victims is estimated to be \$2 billion/year, of which approximately \$270 million is State Medicaid dollars. Medicaid is the payer of last resort for many families and often exceeds \$1 million for each long term care patient.

Evidence-based medicine delivers research-based best practices and creates efficiency and effective treatments. Evidence-based medicine, (EBM), is becoming a key component of health care reform efforts. EBM is the practice of medicine guided by the strength of the best available research. It is a rigorous approach to evaluating the literature and developing practice recommendations substantiated and demonstrated to improve patient results. TBI guidelines are written, published and approved for use by the *American Medical Association*, the *American Association of Neurological Surgeons*, the *Congress of Neurological Surgeons* and the *World Health Organization*. Even though EBM guidelines are demonstrated to improve care, adherence has proven to be limited.

Ample medical research/literature exists demonstrating that the implementation of TBI evidence-based guidelines improves patient outcomes-reducing mortality by 50%, improving functional outcome by 50% and reducing acute care costs by 20%. When we talk about traumatic brain injury patients we are usually talking about motorcycle accidents, car accidents, factory worker accidents, *and perhaps our soldiers in combat.*

Michigan is a leader having funded an early pilot program in two hospitals to implement a new software program that brings evidence based TBI guidelines to the finger tips of our ICU and Trauma Center personnel. Recommendation: appropriate \$100,000 to fund a second phase of the statewide roll out of this program to two new hospitals and if matched with federal Medicaid, it can also extend the work in the original two Level I trauma hospitals. This phase will also include a newly developed Pediatric TBI product. The ultimate goal is to implement this system Statewide in 2012-2013 in all Level I Trauma Hospitals to empower them to utilize evidence-based medicine to dramatically reduce our cost of care while leading to better outcomes for our citizens.

This proven software product is a web-based, HIPPA compliant software program that has been clinically tested, well received by doctors and nurses and demonstrated to increase compliance with best practices. This program puts evidence-based medicine right in front of our doctors and nurses, at the point-of-care, where the greatest difference in cost and outcomes can be made.

Based on analysis in ten NY hospitals, this type of program saved twelve Medicaid dollars for everyone one spent on the product. Where implemented it has created significant savings, received strong clinical support, and changed doctor practice by making it easy to insure compliance with best practices and internationally accepted guidelines.

**Target Hospitals – Phase II Traumatic Brain Injury Evidence Based Medicine Project**

St. Mary's – (Saginaw)	Free
Borgess Medical Center (Kalamazoo)	Free
Midland (can not confirm Trauma Center)	\$100,000
Additional New Hospital TBD	<u>\$100,000</u>
Total Supplemental	\$200,000

**Notes:**

**Total Supplemental Appropriation can be \$100,000 if federal Medicaid match is obtained.**

**In addition to continuing Adult TBI product in St. Mary's and Borgess, Phase II will include the implementation of a second and new product: Pediatric TBI.**

### Target Level I Trauma Hospitals – State Wide Implementation 2012-2013

Recommendation: \$1.3 Million to implement program in all thirteen Level I Adult and Pediatric Trauma Hospitals.

#### **Level I Trauma Hospitals**

- University of Michigan Hospital (Ann Arbor) – Level I Trauma Center
- Detroit Receiving Hospital (Detroit) – Level I Trauma Center
- Henry Ford Hospital (Detroit) – Level I Trauma Center
- Hurley Medical Center (Flint) - Level I Trauma Center
- Spectrum Health - Butterworth Campus - (Grand Rapids) - Level I Trauma Center
- Borgess Medical Center (Kalamazoo) - Level I Trauma Center
- Bronson Methodist Hospital (Kalamazoo) - Level I Trauma Center
- Sparrow Hospital (Lansing) - Level I Trauma Center
- William Beaumont Hospital (Royal Oak) - Level I Trauma Center

#### **Level I Pediatric Trauma Hospitals**

- C.S. Mott Children's (Ann Arbor) – Level I Pediatric Trauma Center
- Children's Hospital of Michigan (Detroit) – Level I Pediatric Trauma Center
- Spectrum Health - Helen DeVos Children's Hospital - (Grand Rapids) - Level I Pediatric Trauma Center

#### **Level II Trauma Hospitals**

- St. Joseph Mercy Hospital (Ann Arbor/Ypsilanti) – Level II Trauma Center
- Oakwood Hospital and Medical Center (Dearborn) – Level II Trauma Center
- St. John Hospital & Medical Center (Detroit) – Level II Trauma Center
- Sinai-Grace Hospital (Detroit) – Level II Trauma Center
- Botsford General Hospital (Farmington) – Level II Trauma Center
- Genesys Regional Medical Center (Grand Blanc) – Level II Trauma Center
- Saint Mary's Mercy Medical Center - (Grand Rapids) - Level II Trauma Center
- Marquette General Health System (Marquette) – Level II Trauma Center
- Mount Clemens Regional Medical Center (Mt. Clemens) – Level II Trauma Center
- POH Regional Medical Center (Pontiac) - Level II Trauma Center
- Covenant Healthcare (Saginaw) - Level II Trauma Center
- St. Mary's of Michigan (Saginaw) - Level II Trauma Center
- Munson Medical Center (Traverse City) - Level II Trauma Center

#### **Level II Pediatric Trauma Hospitals**

- St. John Hospital & Medical Center (Detroit) – Level II Pediatric Trauma Center
- Covenant Healthcare (Saginaw) - Level II Pediatric Trauma Center

#### **Level III Trauma Hospitals**

- Portage Health (Hancock) – Level III Trauma Center

### **Veterans TBI (traumatic brain injury) Rehabilitation-Phase Best Practices Program**

- Michigan's Medical System receives a large number of America's wounded warriors/veterans (reportedly 40% according to the MHA).
- Evidence Based Best Practice Guidelines exist for TBI victim rehabilitation.
- EBMCare's existing TBI product is for the Acute Phase only.
- As Part of the State-wide implementation in 2012-2013 budget in all Level I Trauma Centers, EBMCare is willing to develop and test a TBI-Rehab Phase product in selected rehabilitation facilities treating Veterans.
- This product would then be available to implement throughout the state bringing best practice services to all Michigan TBI victims in rehab.
- Assuming the continued State-wide implementation of its TBI-Acute Phase product in Michigan, EBMCare will provide a discounted price for the State-wide implementation of the TBI-Rehab product in the 2013-2014 budget cycle.